WHAT IS CLAIMED IS:

1.A corrosion-resisting and wear-resisting alloy, which is obtained by selecting a material from cobalt base added with Cr and/or W, nickel base added with Fe and/or Cr, and iron base added with Cr and/or Ni, casting said material into an ingot or a slab as an intermediate material, applying hot plastic forming at a temperature which is 650°C or more and the solidus temperature or less to said intermediate material, which includes a structure comprising mesh-like eutectic carbide and a base material surrounded by the eutectic carbide, forming the eutectic carbide as a discontinuous distribution in a form of multiple grains or clusters, wherein the coefficient of friction is 0.1 to 0.5, and the Vickers hardness without age hardening process is 300 to 600 Hv.

2.A corrosion-resisting and wear-resisting alloy according to Claim 1, wherein the coefficient of friction is 0.3 or less.

3.A corrosion-resisting and wear-resisting alloy according to Claim 1, wherein the cobalt base added with Cr and/or W comprises 0.1 to 3.5% of C, 25% or less of Ni, 25 to 35% of Cr, 5% or less of Fe, 20% or less of W, 1.5% or less of Mo, and 1.5% or less of Si in weight ratio, the balance Co and inevitable

impurities.

4.A corrosion-resisting and wear-resisting alloy according to Claim 1, wherein the nickel base added with Fe and/or Cr comprises 0.1 to 2.5% of C, 3 to 9% of Si, 7 to 25% of Cr, 0.5 to 5% of B, 2 to 6% of Fe, 1 to 5% of W, and 17% or less of Mo in weight ratio, the balance Ni and inevitable impurities.

5.A corrosion-resisting and wear-resisting alloy according to Claim 1, wherein the iron base added with Cr and/or Ni comprises 0.1 to 1.5% of C, 0.3 to 4% of Si, 4 to 9% of Ni, 3% or less of Mo, 6 to 10% of Mn, and 15 to 25% of Cr in weight ratio, the balance Fe and inevitable impurities.

6.A fluid device wherein the corrosion-resisting and wear-resisting alloy according to Claim 1 is used for a wear-resisting part or an erosion shield part.

7.A fluid device wherein the corrosion-resisting and wear-resisting alloy according to Claim 1 with the coefficient of friction of 0.1 to 0.3 is used for a wear-resisting part or an erosion shield part.

8.A dynamic device wherein the corrosion-resisting and wear-resisting alloy according to Claim 1 is joined with a base metal without changing the metal composition for application to a sliding part or a contact part.

9.A dynamic device wherein the corrosion-resisting and wear-resisting alloy according to Claim 1 with the coefficient of friction of 0.1 to 0.3 is joined with a base metal without changing the metal composition for application to a sliding part or a contact part.

10.A valve, which is provided with a valve element and a valve casing, wherein valve seats are provided on contact faces of both of the valve element and the valve casing, and a base body of said valve seats is provided with a member which comprises one type of alloy selected from a cobalt-base alloy, a nickel-base alloy, and an iron-base alloy, in which grain-like or cluster-like eutectic carbide is diffused as a discontinued distribution, and which has the coefficient of friction of 0.1 to 0.3.

11.A nuclear power plant, which is provided with a piping system including a valve on a piping through which a coolant flows, wherein said valve is a valve according to Claim 10.

12.A pump wherein a seat and a washer, which relatively rotate about a rotating shaft of the pump, are in contact with each other at a sealed end, and either of the contact faces of the said seat or said washer is provided with a member which comprises one type of alloy selected from a cobalt-base alloy, a

nickel-base alloy, and an iron-base alloy, in which grain-like or cluster-like eutectic carbide is diffused as a discontinued distribution, and which has the coefficient of friction of 0.1 to 0.3.

13. An internal combustion engine, wherein a valve seat part and a valve are provided on a cylinder head of said internal combustion engine, valve seats are respectively provided on contact faces of both of said valve seat part and said valve, and surfaces of base bodies of said valve seats is provided with a member which comprises one type of alloy selected from a cobalt-base alloy, a nickel-base alloy, and an iron-base alloy, in which grain-like or cluster-like eutectic carbide is diffused as a discontinued distribution, and which has the coefficient of friction of 0.1 to 0.3.

14. An internal combustion engine, wherein at least either of contact faces of a valve lifter or a cam of the internal combustion engine is provided with a member which comprises one type of alloy selected from a cobalt-base alloy, a nickel-base alloy, and an iron-base alloy, in which grain-like or cluster-like eutectic carbide is diffused as a discontinued distribution, and which has the coefficient of friction of 0.1 to 0.3.

15.A rotating device comprising:

a casing in which liquid flows;

a rotating shaft which is inserted into said casing; and

a mechanical seal device which seals between said rotating shaft and said casing;

wherein said mechanical seal device is provided with a first seal, which rotates with said rotating shaft, and a second seal, which is provided on said casing and is in contact with said first seal, at least either of said first seal or said second seal includes a corrosion-resisting and wear-resisting alloy where grain-like or cluster-like eutectic carbide is diffused in a matrix part of a metal micro structure, and which is in contact with the other seal, and a main body, and said corrosion-resisting and wear-resisting alloy is diffusion-welded to said main body.

16.A liquid pressurizing device comprising:

a casing;

a rotating shaft inserted into said casing;

a fluid pressurizing mean which is provided on said rotating shaft and pressurizes fluid; and

a mechanical seal device which seals between said rotating shaft and said casing;

wherein said mechanical seal device is provided with a first seal, which rotates with said rotating shaft, and a second seal, which is provided on said casing and is in contact with said first seal, at least either of said first seal or said second seal includes a corrosion-resisting and wear-resisting alloy where grain-like or cluster-like eutectic carbide is diffused in a matrix part of a metal micro structure, and which is in contact with the other seal, and a main body, and said corrosion-resisting and wear-resisting alloy is diffusion-welded to said main body.

17.A liquid pressurizing device according to claim 16 wherein said corrosion-resisting and wear-resisting alloy has 0.1 to 0.3 of coefficient of friction, and 300 to 600 Hv of Vickers hardness without age hardening process.

18.A liquid pressurizing device according to claim 17 wherein said corrosion-resisting and wear-resisting alloy is constituted with a cobalt base material added with Cr and/or W comprises 0.1 to 3.5% of C, 25% or less of Ni, 25 to 35% of Cr, 5% or less of Fe, 20% or less of W, 1.5% or less of Mo, and 1.5% or less of Si in weight ratio, the balance Co and inevitable impurities.

19.A liquid pressurizing device according to claim 17 wherein said corrosion-resisting and wear-resisting alloy is constituted with a nickel base material added with Fe and/or Cr comprises 0.1 to 2.5% of C, 3 to 9% of Si, 7 to 25% of Cr, 0.5 to 5% of B, 2 to 6% of Fe, 1 to 5% of W, and 17% or less of Mo in weight ratio, the balance Ni and inevitable impurities.

20.A liquid pressurizing device according to claim 17 wherein said corrosion-resisting and wear-resisting alloy is constituted with an iron base material added with Cr and/or Ni comprises 0.1 to 1.5% of C, 0.3 to 4% of Si, 4 to 9% of Ni, 3% or less of Mo, 6 to 10% of Mn, and 15 to 25% of Cr in weight ratio, the balance Fe and inevitable impurities.